

**REMARKS**

Claims 1-43 were pending prior to this Amendment.

In the June 22, 2007 Official Action, claims 1-40 were rejected under 35 USC 102(b) as anticipated by DE 100 17 438; claims 1-40 were rejected under 35 USC 102(b) as anticipated by US 5,024,355 to Jouillat, et al.; Claims 1-16 and 18-40 were rejected under 35 USC 102(e) as anticipated by US 7,008,433 to Voellmicke et al., and; Claims 1-16 and 18-40 were rejected under 35 USC 102(b) as anticipated by US 4,077,494 to Spaude et al. Claims 41-43 were rejected under 35 USC 103(a) as obvious over DE 100 17 438 in view of US 6,062,212 to Davidson; Claims 41-43 were rejected under 103(a) as obvious over US 5,024,355 to Jouillat et al in view of US 6,062,212 to Davison.

In this submission, claims 3, 4, 6, 9, 13, 30, 31, 35, 37, and 39-43 have been cancelled, new dependent claims 45-52 have been added, and Claims 1, 5, 7, 10, 11, 13, 15, 16, 19, 27, 28, 32, 34, and 36 have been amended.

Thus, claims 1, 2, 5, 7, 8, 10-12, 14-29, 32-34, 36, 38, and 45-52 are now presented for further examination.

Concerning the Examiner's novelty rejection to the previous claims based on DE 100 17 438 (DE '438), US 5024355 (JOUILLAT), US 7008433 (VOELLMICKE) and US 4077494 (SPAUDE), applicant respectfully asserts that none of these references disclose the dispenser of claim 1, as now presented, for the following reasons.

Claim 1 requires the dispenser to have a storage chamber which stores a fluid product which is a medicament. Quite clearly this requirement is not satisfied by VOELLMICKE and SPAUDE, as the respective dispensers thereof store bone cement (e.g. PMMA) and grease.

Further, none of DE '438, VOELLMICKE and SPAUDE disclose a dispenser having a bleed arrangement, as required by claim 1. DE '438 does not *per se* disclose that the cream in the pumping chamber 7 bleeds (back into the storage chamber 2) as the plunger 3 is moved towards the outlet valve 13;27;35 in the pump chamber 7. Moreover, DE '438 does not disclose when the outlet valve opens in relation to the dispensing movement of the plunger 3, or that the piston 23 is arranged be displaced rearwardly in the storage chamber 2 to accommodate bleeding as the cream is pushed by the plunger 3. Thus, it cannot be concluded that cream in the pumping chamber 7 bleeds into the storage chamber 2.

VOELLMICKE also does not *per se* disclose bleeding of the bone cement from the injection chamber 21 (back into the reservoir 3) as the piston 33 is moved towards the exit opening 27 of the injection chamber 21. Moreover, VOELLMICKE does not disclose when a check valve 65 or flow restrictor 96 disposed at the exit opening 27 opens in relation to the dispensing movement of the piston 33. Thus, it cannot be concluded that cement in the injection chamber 21 bleeds into the reservoir 3.

Similar comments to those made for DE '438 and VOELLMICKE apply to SPAUDE. Specifically, there is no *per se* disclosure of bleeding of the grease from the pump cylinder 28, or any disclosure of when the check valve 33 opens in relation to the dispensing movement of the piston 40 or of the plunger 8 arranged to be displaced rearwardly in the cylinder 2 (here, against the bias of the spring 11) to accommodate bleeding as the grease is pumped by the piston 40.

Furthermore, JOUILLAT does not disclose a dispenser having a plunger structure arrangement as required by claim 1. Specifically, claim 1 requires a plunger structure which has a head *at its forward end* which forms a first wall

member of the boundary wall structure of the metering chamber. When the plunger structure moves forwardly (i.e. *with the head at its leading end*) relative to a second wall member of the metering chamber boundary wall structure, the surplus volume of the fluid product in the metering chamber is bled from the metering chamber by the bleed arrangement and then the metered volume of the fluid product is caused to be dispensed through the outlet orifice. *In JOUILLAT, however, the head (piston 31) of the plunger structure (rod-piston 3) is at the trailing/rear end, having regard to the (forward) direction of dispensing movement of the rod-piston 3.*

Thus, claim 1 is novel over each of DE '438, JOUILLAT, VOELLMICKE and SPAUDE. All the other claims, being directly or indirectly dependent on novel claim 1, are novel for the same reasons.

Moreover, claim 1 is not obvious in light of any of the cited references. Claim 1 defines a structurally distinct dispenser from that disclosed in JOUILLAT which would not be arrived at in a routine manner. None of DE '438, VOELLMICKE and SPAUDE disclose dispensers where metering is a requirement for the fluid products intended to be delivered thereby (cream, bone cement, grease) and, accordingly, would not be considered suitable starting points by a skilled person in the art desirous of developing a metering dispenser.

The other claims, being dependent directly or indirectly upon claim 1, define novel and non-obvious for at least the same reasons as claim 1.

Claims 41-43 have been cancelled, without prejudice. Thus, the objection raised to these claims is rendered moot.

### **Conclusion**

In light of the amendments made herein, all issues raised by the examiner to date have been addressed. As such, the claims are asserted to be in a condition for allowance.

Applicant requests that a timely Notice of Allowance be issued in this case. If any matters exist that preclude issuance of a Notice of Allowance, the examiner is requested to contact the applicant's representative at the number indicated below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge any fees or credit any overpayment, particularly including any fees required under 37 CFR Sections 1.16 and/or 1.17, and any necessary extension of time fees, to deposit Account No. 07-1392.

Respectfully submitted,

Dated: December 20, 2007

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